



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
555 CORDOVA STREET
ANCHORAGE, AK 99501

WASTE MANAGEMENT PERMIT

for

Alaska Gold Torrent LLC.

Permit No. 2017DB0001

Date: XXXX

This Waste Management Permit is issued to Alaska Gold Torrent, LLC. (AGT), P.O. Box 409, Willow, AK 99688 for the disposal of gravity separated ore waste from the Lucky Shot Mine at the Lucky Shot Mill in Willow, Alaska. The Lucky Shot Mill facilities are located on a 29.62 acre parcel on the east side of the Parks Highway just north of milepost 75. This permit is authorized under the provisions of Alaska Statutes (AS) 46.03, and the Alaska Administrative Code (AAC), 18 AAC 15, 18 AAC 60, 18 AAC 70 and 18 AAC 72, as amended or revised, and other applicable state laws and regulations. This permit is effective **XXXX** and expires after **XXXX**. This permit may be terminated or modified according to AS 46.03.120.

This permit is subject to the conditions and stipulations contained in sections 1 through 4. This permit incorporates by reference the *Lucky Shot Gold Mine Project Description and Permit Applications* (March 14, 2017), *Amendment to the Lucky Shot Gold Mine Project Description and Permit Applications* (March 30, 2017), and *Supplemental Figure 13A* (February 2017). Changes to the documents incorporated herein must be approved by the Alaska Department of Environmental Conservation (Department) if they affect this permit. When the Department approves the changes, they become part of this permit.

After completing reclamation activities and disposal of impounded process water, the Department requires the Permittee to conduct post-closure maintenance and monitoring for a minimum of five years. The Permittee shall assess the conditions at the facility and respond accordingly throughout the post-closure care period. At the end of the post-closure period, the Department will determine whether post-closure care and monitoring should be extended beyond five years based upon the information collected by that time.

DRAFT

Wade Strickland

Program Manager

TABLE OF CONTENTS

1	PERMIT COVERAGE & ADOPTED REFERENCES	3
1.1	COVERAGE	3
1.2	ADOPTED REFERENCES	3
2	SPECIFIC CONDITIONS	4
2.1	WASTE DISPOSAL FACILITIES	4
2.2	SITE CONSTRUCTION, MAINTENANCE, & OPERATION	6
2.3	MONITORING	7
2.4	REPORTING	10
2.5	CORRECTIVE ACTIONS	11
2.6	SUSPENSION OF OPERATIONS	12
2.7	TERMINATION OF MILLING	13
3	GENERAL CONDITIONS	14
3.1	ACCESS AND INSPECTION	14
3.2	INFORMATION ACCESS	14
3.3	CIVIL AND CRIMINAL LIABILITY	14
3.4	AVAILABILITY	14
3.5	ADVERSE IMPACT	14
3.6	CULTURAL OR PALEONTOLOGICAL RESOURCES	14
3.7	APPLICATIONS FOR RENEWAL	14
3.8	OTHER LEGAL OBLIGATIONS	14
3.9	TRANSFER OF OWNERSHIP	15
3.10	TOXIC POLLUTANTS	15
3.11	POLLUTION PREVENTION	15
4	FINANCIAL RESPONSIBILITY	15
4.1	PROOF OF FINANCIAL RESPONSIBILITY	15
5	REFERENCES	17
6	GLOSSARY OF TERMS	18
7	LUCKY SHOT MILL LAYOUT AND GROUNDWATER MONITORING LOCATIONS	19

1 PERMIT COVERAGE & ADOPTED REFERENCES

1.1 COVERAGE

The Lucky Shot Project consists of a gold mine near Hatcher Pass, Alaska and a mill located near Willow, Alaska. Ore from the Lucky Shot Mine will be trucked to the Lucky Shot Mill (Mill) for processing. Operations at the Lucky Shot Mine are not covered under this permit. The Mill is projected to process 200 tons of ore per day, five days per week, over a projected mine life of four to six years.

At the Mill, free gold will be liberated from the ore and a high grade concentrate will be produced using gravity. No chemicals will be used in the processing of ore. Concentrate from the Mill will be refined by induction furnaces to produce gold doré bars on site. Four material streams will be produced by the Mill: gold, clay, sand, and refinery slag. Clay and sand will be disposed of onsite. Refinery slag may be disposed of onsite, if approved by DEC.

1.1.1 This permit covers disposal of waste or monitoring as follows:

1.1.1.1 Clay Ponds

Crushed ore will be de-slimed with screw classifiers. The waste from de-sliming, fine grained clay particles, will be disposed in unlined ponds.

1.1.1.2 Sand Ponds

The reject from the Mill will consist predominantly of quartz-sand. Sand will be disposed in lined ponds. Water from the sand ponds will be monitored according to section 2.3.

1.1.1.3 Refinery Slag

Refinery slag may be disposed onsite if, after consultation with DEC, approval is granted. Approximately 20 tons of refinery slag will be generated annually.

1.1.1.4 Groundwater Monitoring Sites

There are three groundwater monitoring wells at the Mill that will be used for groundwater monitoring. GW-1 and GW-3 are upgradient of all disposal facilities and will serve as the background sites. GW-4 is downgradient of the disposal facilities. Each well will be monitored for the parameters in Table 1.

1.1.1.5 Process Water Monitoring Site

Process water associated with the Mill, which will be stored in a water storage pond, will be monitored according to Section 2.3.

1.1.2 This permit also covers hazardous chemical storage and containment.

1.1.3 This permit covers reclamation and closure activities of all disposal sites.

1.1.4 The Department may set or modify permit conditions based on monitoring results or changes in facility processes according to permit amendment or modification procedures.

1.2 ADOPTED REFERENCES

1.2.1 In addition to the stipulations in this permit, the Permittee shall adhere to the

requirements of 18 AAC 15 Administrative Procedures, 18 AAC 60 Solid Waste Management Regulations, 18 AAC 70 Alaska Water Quality Standards (WQS), and 18 AAC 72.500 – 72.600 Non-Domestic Wastewater Disposal. The Permittee shall also adhere to Department-approved plans authorized under the permit. When the terms of this permit differ from the terms of the project documents adopted by reference in this section, the terms of this permit override the terms contained in the project documents. Project documents must also be updated incorporating any changes necessary to be consistent with the terms of this permit. Department-approved plans adopted by reference into this permit include the following documents:

- 1.2.1.1 *Lucky Shot Gold Mine Project Description and Permit Applications* (March 14, 2017).
- 1.2.1.2 *Amendment to the Lucky Shot Gold Mine Project Description and Permit Applications* (March 30, 2017).
- 1.2.1.3 *Supplemental Figure 13A* (February 2017).

2 SPECIFIC CONDITIONS

2.1 WASTE DISPOSAL FACILITIES

2.1.1 All Waste Disposal Facilities - Waste disposal is permitted as described in section 2.1 provided that the conditions of this permit are satisfied.

2.1.1.1 Limitations

- 2.1.1.1.1 A minimum of two feet of freeboard shall be maintained in open ponds at all times.
- 2.1.1.1.2 All ponds shall be incised.
- 2.1.1.1.3 All ponds must operate as zero discharge facilities preventing any discharge of solids or liquids, consistent with the information in the *Lucky Shot Gold Mine Project Description*.
- 2.1.1.1.4 No petroleum products or other hazardous substances shall be discharged to the ponds.
- 2.1.1.1.5 Refinery slag shall not be disposed of onsite, unless approved in writing by the Department. Before approval is granted, the Permittee will be required to demonstrate, using test methods acceptable to the Department, that the refinery slag is inert.
- 2.1.1.1.6 Under 18 AAC 60.265, proof of financial responsibility to cover the cost of closing the disposal facilities and performing post-closure monitoring must be provided.
- 2.1.1.1.7 A minimum of one groundwater monitoring well shall be maintained downgradient of all disposal facilities at all times.
- 2.1.1.1.8 The water in the downgradient monitoring well(s) must not demonstrate a statistically significant increase in constituent concentrations above background groundwater quality. Statistical significance shall be determined using one of the methods outlined in 18 AAC 60.830(h) and in

accordance with the Department's *Groundwater Detection Monitoring Technical Memorandum 16.04*. If there is a statistically significant increase, then corrective action as designated in section 2.5.3 must be implemented.

- 2.1.1.1.9 The Permittee shall control and treat onsite surface water and groundwater as necessary to prevent offsite water quality exceedances.
- 2.1.1.1.10 Activities at the site which will cause a greater amount of waste material to be treated and disposed than considered in this section of the permit are prohibited without the prior approval by the Department.
- 2.1.1.1.11 The following materials shall not be disposed onsite, unless approved in writing by the Department:
 - 2.1.1.1.11.1. Chemical containers and discarded, unused chemicals,
 - 2.1.1.1.11.2. Contaminated soils, spill boom, liners used for the containment of spilled materials, chemicals used in the cleanup of spills or other spill cleanup wastes,
 - 2.1.1.1.11.3. Household waste,
 - 2.1.1.1.11.4. Laboratory wastes,
 - 2.1.1.1.11.5. Untreated sewage solids,
 - 2.1.1.1.11.6. Asbestos waste,
 - 2.1.1.1.11.7. Acute hazardous wastes, as defined by 18 AAC 60.990(157), including radioactive material, explosives, strong acids and untreated pathogenic waste, however, this prohibition does not preclude disposal of natural minerals found in mine rock,
 - 2.1.1.1.11.8. Fuels, oil, transformers, paint, or associated equipment and packing material,
 - 2.1.1.1.11.9. Glycol and solvents, and
 - 2.1.1.1.11.10. Batteries.
- 2.1.2 Clay Ponds – The following conditions under section 2.1.2 apply to the clay ponds.
 - 2.1.2.1 Waste materials disposed of in the clay ponds are limited to no more than 2,800 tons on an annual basis.
 - 2.1.2.2 No more than four ponds shall be open at the same time.
- 2.1.3 Sand Ponds – The following conditions under section 2.1.3 apply to the sand ponds.
 - 2.1.3.1 Before installing a sand pond, the Permittee must submit notice to the Department according to section 2.2.3.2 and receive written approval from the Department.
 - 2.1.3.2 Waste materials disposed of in the sand ponds are limited to no more than 66,000 tons on an annual basis.
 - 2.1.3.3 No more than eight sand ponds shall be open at the same time.

2.1.3.4 The bottom of all sand ponds shall be lined. The minimum thickness for a flexible membrane liner is 30 mils or 60 mils if the liner consists of high density polyethylene. An alternative liner may be proposed in the pond design package submitted for approval by the Department under section 2.2.3.2.

2.1.3.5 Sand ponds shall be closed as follows:

2.1.3.5.1 All pumpable fluids shall be removed, resulting in a waste that is in a non-liquid condition,

2.1.3.5.2 All ponds shall be capped,

2.1.3.5.3 Appropriate measures shall be taken to ensure that the contents of a containment structure are of sufficient compressive strength to support a cap,

2.1.3.5.4 Caps shall have a hydraulic conductivity less than or equal to the hydraulic conductivity of the containment liner,

2.1.3.5.5 The cap shall be covered with a vegetative cover or otherwise reclaimed in a manner consistent with the reclamation and closure plan.

2.1.3.5.6 The Permittee may use an alternate method for closure if approved by the Department.

2.2 SITE CONSTRUCTION, MAINTENANCE, & OPERATION

2.2.1 General

2.2.1.1 Changes that may have a significant impact on closure, reclamation, or water quality, information on engineering changes to the Mill that could affect the quantity or quality of waste streams, new waste treatment processes, changes to solid waste disposal facilities, changes to the monitoring well system, and the addition of new waste streams must be submitted to the Department and approval must be obtained prior to any such changes or discharges.

2.2.1.2 The Permittee shall develop the site in accordance with Department-approved plans and amendments thereof, which are submitted by the applicant as required by this permit. Pollution prevention concepts shall be incorporated into operational plans for the project.

2.2.2 Secondary Containment

2.2.2.1 Secondary containment of all hazardous substances, as defined at AS 46.03.826(5), must be impermeable to those stored hazardous substances.

2.2.2.2 The Permittee shall provide and maintain secondary containment for all vessels containing hazardous or toxic materials. Secondary containment is considered to be 110% of the largest tank within a containment area or the total volume of manifolded tanks. The Permittee must design and install secondary containment structures in a manner that ensures that solid waste and leachate will not escape from the structures. To prevent such discharges, facilities shall be maintained in good working condition at all times by the Permittee. The Permittee must demonstrate that any changes to the systems are equally or more protective of human health and the environment than the requirements prescribed by the

permit.

2.2.3 Notification

- 2.2.3.1 No chemicals shall be introduced into the milling process without written Department approval.
- 2.2.3.2 Under 18 AAC 72.600, the Permittee shall submit engineering plans to the Department at least 60 days before construction or modification of an applicable system, and receive Department approval of any changes that will significantly modify the quality or quantity of a discharge, the operation of a waste treatment component, or the disposal facilities.
- 2.2.3.3 The Permittee must submit to the Department within 90 days after completing construction of a significant modification to an existing process component:
 - 2.2.3.3.1 As-built drawings of the process component(s) which show any changes of those aspects that would affect performance of that process component as required in 18 AAC 72.600,
 - 2.2.3.3.2 A summary of the quality control activities that were carried out during construction, and
 - 2.2.3.3.3 The revised operating plans that reflect modifications made during construction.

2.2.4 Fuel and Hazardous Substances

- 2.2.4.1 The Permittee shall design all vessels which store or convey hazardous substances to allow for routine inspections for leaks.
- 2.2.4.2 The Permittee shall maintain fuel handling and storage facilities in a manner that will prevent the discharge of hazardous substances.

2.3 MONITORING

- 2.3.1 Monitoring requirements may be altered with Department approval.
- 2.3.2 Groundwater shall be monitored at sites GW-1, GW-3, and GW-4 for the parameters in Table 1.
- 2.3.3 A minimum of one sample shall be collected from an active sand pond and monitored for the parameters in Table 1.
- 2.3.4 Process water from the water storage pond shall be monitored for the parameters in Table 1.
- 2.3.5 Analytical methods used for water quality monitoring must achieve the minimum levels of quantification (MLs) in Table 1.

Table 1: Water Quality Monitoring Parameters

Parameter ^a	Units	ML ^b
Aluminum	µg/L ^c	87
Antimony	µg/L	6
Arsenic	µg/L	10
Cadmium	µg/L	0.16
Calcium	mg/L ^d	0.10
Copper	µg/L	5.16
Iron	µg/L	1,000
Lead	µg/L	1.32
Magnesium	mg/L	0.10
Manganese	µg/L	50
Mercury	µg/L	0.012
Molybdenum	µg/L	10
Nickel	µg/L	29.02
Silver	µg/L	1.15
Zinc	µg/L	66.6
pH	s.u. ^e	N/A
Hardness as CaCO ₃ ^e	mg/L ^f	N/A
Nitrate as N	mg/L	10
Selenium	µg/L	5
Sulfate	mg/L	250
Total Dissolved Solids (TDS)	mg/L	500
a. All metals shall be measured as total recoverable. b. MLs for hardness dependent parameters are based on a hardness of 50 mg/L as CaCO ₃ . c. Micrograms per liter d. Milligrams per liter e. Standard units f. Hardness as CaCO ₃ = 2.497[Ca] + 4.118[Mg]		

2.3.6 A minimum of one sample of the sand reject shall be collected, and the net neutralization potential of the sample shall be determined by Acid-Base Accounting (Modified Sobek Method)

2.3.7 All water quality and sand reject monitoring shall be conducted quarterly.

- 2.3.8 All waste disposal facilities shall be visually monitored for signs of damage or potential damage from settlement, ponding, leakage, thermal instability, frost action, erosion, thawing of the waste, or operations at the site. Visual monitoring shall be weekly and documented.
- 2.3.9 Signs of stress to vegetation associated with facility activities must be monitored.
- 2.3.10 The Permittee must develop a quality assurance project plan (QAPP) for all monitoring required by this permit. The QAPP may be contained in an overall monitoring plan for the entire project. The QAPP, or the QAPP portion of an overall monitoring plan, must be completed within 60 days of the effective date of this permit and made available upon request.
 - 2.3.10.1 The QAPP must be designed to assist in planning for the collection and analysis of samples in support of the permit and in explaining data anomalies when they occur, and the QAPP must be formatted as specified in the most recent edition of *Elements of a Tier 2 Water Quality Monitoring Quality Assurance Project Plan (QAPP)* by DEC, Division of Water, Water Quality Standards, Assessments and Restoration Program.
 - 2.3.10.2 Throughout all sample collection and analysis activities, the Permittee must use chain-of-custody procedures described in the most recent edition of *Elements of a Tier 2 Water Quality Monitoring Quality Assurance Project Plan (QAPP)* by DEC, Division of Water, Water Quality Standards, Assessments and Restoration Program.
 - 2.3.10.3 The Permittee must amend the QAPP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAPP.
 - 2.3.10.4 A copy or copies of the QAPP must be kept onsite and made available to the Department upon request.
- 2.3.11 Samples taken as required by section 2.3 shall be analyzed in conformance with the most recent QAPP.
- 2.3.12 Maintenance of inspection and sampling logs and procedures for processing, consolidating, and reporting inspection and sampling data shall be in conformance with the most recent QAPP.
- 2.3.13 Groundwater monitoring and corrective action monitoring shall be in accordance with section 2.5, 18 AAC 60 Solid Waste Management Regulations, and the most recent QAPP.
- 2.3.14 The Department may modify monitoring requirements, including the establishment of additional compliance points in response to trends showing changes in the concentration of parameters being monitored.
- 2.3.15 If the Permittee monitors any influent, effluent, receiving water, or solid waste characteristic in addition to those identified in this permit, or more frequently than required, the Permittee shall notify the Department that the additional monitoring has occurred in the next quarterly report after the monitoring has occurred. The results of such monitoring shall be available for inspection by the Department at the project

site, or other location proposed by the Permittee and agreed upon by the Department. The Permittee shall provide copies of the results to the Department upon request.

2.4 REPORTING

- 2.4.1 Monitoring results shall be reported, as applicable, according to sections 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.7, 2.4.8, and 2.5.3.1.
- 2.4.2 When an exceedance of a WQS and a statistically significant increase above background concentrations is discovered at a groundwater monitoring location, or if noncompliance with a requirement set out in sections, 2.1 or 2.2 is discovered, the Permittee shall notify the Department no later than the end of the next working day after discovery, and shall conduct corrective actions according to section 2.5.3.
- 2.4.3 The Permittee shall provide the Department with quarterly monitoring reports summarizing inspection and monitoring results required in section 2.3. Reports shall satisfy the following conditions.
 - 2.4.3.1 Due Dates - Reports for the first three calendar quarters are due within 60 days after the quarter ends, and the report for the fourth calendar quarter shall be submitted by March 1st of the following year.
 - 2.4.3.2 Form – Reports shall be provided in electronic form using commercially available software or according to other electronic reporting requirements approved by the Department. Paper copies of the reports are not required unless specifically requested.
 - 2.4.3.3 Content - Reports shall contain a narrative portion discussing data and information collected during the preceding quarter.
 - 2.4.3.4 Graphing - Reports shall present water quality data in graphical form indicating trends as well as the margin of compliance with limits.
 - 2.4.3.4.1 Graphs of concentration measurement versus time must including the past five years of data, if available, and may contain all historic data.
 - 2.4.3.4.2 The graphs must also include the parameter, units, and applicable WQS.
 - 2.4.3.4.3 Multiple stations, identified using symbols in a legend, may be included in the same graph.
 - 2.4.3.4.4 Scales shall be proportioned to display the WQS, as indicated by a highlighted line, near the top of the graph or when data exceeds the limit, the maximum value shall be near the top of the graph.
 - 2.4.3.4.5 Formatting shall allow addition of new data to each graph's cumulative data when producing the next quarterly report.
 - 2.4.3.4.6 For graphical purposes, non-detect values shall be plotted at one half the method detection limit (MDL), and values between the ML and MDL shall be plotted at the value of the qualified measurement.
- 2.4.4 Annual Report - In addition to satisfying the requirements of sections 2.1, 2.3, and 2.4.3, the fourth calendar quarter report serves as the annual report. The annual report shall:

- 2.4.4.1 Be submitted to the Department by March 1st of the following year;
- 2.4.4.2 Contain an electronic copy (preferably Excel) of the water quality data for the reporting year, including the past five years' data, if available, and may contain all historic data in spreadsheet form. When a value is less than the ML, it must be identified as less than the ML, and the ML must be provided. Non-detect values must be identified as less than the MDL or non-detect and the MDL must be provided in the electronic water quality data spreadsheets;
- 2.4.4.3 Address the adequacy of the financial responsibility including, but not limited to, inflation, significant changes in reclamation activity costs, concurrent reclamation, expansion or other changes to the operation of the facility;
- 2.4.5 The Permittee shall provide the Department with copies of any amendments to reclamation and closure plan affecting the waste disposal operations authorized by the permit.
- 2.4.6 All records and information and reports resulting from the monitoring activities required by this permit, including but not limited to all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation, shall be retained in Alaska for observation by the Department for a minimum of five years. Upon request from the Department, the Permittee shall submit certified copies of such records.
- 2.4.7 Any onsite wildlife casualties shall be reported within one working day of discovery to the appropriate state agencies, including the Department.
- 2.4.8 All written reports submitted under the requirements of this permit shall be sent to:
 - Dept. of Environmental Conservation
 - Division of Water, Compliance Program
 - 555 Cordova St.
 - Anchorage, AK 99501
- 2.4.9 Knowingly making a false statement, by the Permittee, the operator or other employees, including contractors, on any such report may result in the imposition of criminal penalties as provided under AS 46.03.790.

2.5 CORRECTIVE ACTIONS

- 2.5.1 The Permittee shall comply with 18 AAC 60.815 if the visual monitoring program in section 2.3.8 discovers damage or potential damage to the waste disposal-related facility that could lead to water quality violations.
- 2.5.2 The Permittee shall comply with 18 AAC 60.820-855 if a statistically significant increase in a constituent concentration above background water quality in the groundwater monitoring wells is discovered. The Permittee shall comply with the notification requirements in 18 AAC 60.850(c) upon determining a statistically significant increase in a constituent concentration.
- 2.5.3 For a single constituent, when a statistically significant increase in concentration is discovered at a water monitoring station or if noncompliance with a requirement set out in sections 2.1 or 2.2 is discovered, the Permittee shall:
 - 2.5.3.1 Orally notify the Department no later than the end of the next working day.

- 2.5.3.2 Determine the extent of the exceedance or noncompliance.
- 2.5.3.3 In consultation with the Department and documented in writing, implement a plan to determine the cause and source of the exceedance or noncompliance.
- 2.5.3.4 Submit to the Department, within seven working days after an exceedance or noncompliance is verified by the Permittee, a plan for corrective actions to prevent adverse environmental impacts and avoid future exceedances of a similar nature.
- 2.5.3.5 Implement the corrective action plan as approved by the Department.

2.6 SUSPENSION OF OPERATIONS

- 2.6.1 Suspension of operations is defined as a suspension of milling/processing activities for more than 90 days but less than three years. The length of time for the period of suspension may be extended beyond three years by written authorization from the Department. The Permittee shall submit a conceptual suspension of operations plan to the Department within 90 days of permit issuance.
- 2.6.2 The Permittee must notify the Department within three days of suspending operations. The notice shall provide the nature of and reason for the suspension and its anticipated duration.
- 2.6.3 No later than ten days after operations have been suspended, the Permittee shall submit a detailed suspension of operations plan that replaces the suspension of operations conceptual plan required by section 2.6.1 with current information and specific details. The suspension plan shall address the following:
 - 2.6.3.1 Explanation of what would reasonably result in resuming or permanently terminating mining or milling/processing activities;
 - 2.6.3.2 Reclamation or construction activities during the period of temporary suspension;
 - 2.6.3.3 Procedures, methods, and schedule to be implemented for the treatment, disposal, or storage of process water;
 - 2.6.3.4 The control of surface and groundwater drainage to and from the facility and the surrounding area;
 - 2.6.3.5 The control of erosion from disturbed areas within the facility boundary;
 - 2.6.3.6 The secure storage of chemicals during the period of suspended operations; and
 - 2.6.3.7 Procedures for maintaining and monitoring water levels in the ponds.
- 2.6.4 The Department shall have 15 days to review and approve or request modifications to the suspension plan.
- 2.6.5 Once a suspension of operations plan has been approved, it becomes enforceable under the conditions of this permit and full implementation of the approved suspension plan is required. The plan can be amended by submitting a revised plan to the Department for approval.
- 2.6.6 During suspension of operations, the Permittee shall:

2.6.6.1 Continue pollution control activities associated at the site.

2.6.6.2 Continue monitoring and reporting activities of all active portions of the site as specified by this permit or the suspension plan.

2.6.6.3 Continue reclamation and corrective action requirements under the reclamation and closure plan in light of the nature of the closure.

2.6.7 Written Department approval is required before resuming operations after a period of temporary closure.

2.7 TERMINATION OF MILLING

2.7.1 Termination of milling/processing activities is defined as the permanent cessation of those activities. Updated reclamation and monitoring plans must be submitted for approval within 90 days after initiating termination of milling/processing. The updated plans must address current conditions at the facility. Updates and changes to those plans must be approved in writing by the Department.

2.7.2 Termination of milling at the site must be implemented and completed according to the conditions of this permit and with the reclamation and closure plan approved by the Department and incorporated by reference into this permit.

2.7.3 Closure of the waste disposal facilities will be complete when the following criteria are met:

2.7.3.1 Department-approved covers are installed on the sand ponds and drainage channels are constructed and stable;

2.7.3.2 A stable vegetative cover is established on the sand ponds, clay ponds, and other infrastructure or other facilities as prescribed in the reclamation and closure plan approved by the Department and incorporated by reference into this permit; and

2.7.3.3 The Department determines that downgradient groundwater monitoring wells are not above WQS and exhibiting a statistically significant increase in constituent concentrations above background water quality.

2.7.4 Closure must be achieved before terminating any care and maintenance activities required by section 2.6.6.1 and the approved suspension plan if a period of suspended operations immediately preceded termination of milling.

2.7.5 The Permittee shall maintain the facility correcting any erosion or settlement that may impair water quality or otherwise threaten the environment, up until the time that this permit, or any successor permit, is transferred to another entity or terminated by the Department.

2.7.6 Post-closure monitoring of groundwater quality and visual monitoring for settlement, and erosion shall be required for a minimum of five years. Post-closure monitoring shall be performed according the reclamation and closure plan approved by the Department. This schedule and the parameters monitored may be modified by the Department based on the monitoring results received.

3 GENERAL CONDITIONS

3.1 ACCESS AND INSPECTION

The Permittee shall allow the Commissioner or his/her representative access to the permitted facility at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, state laws, and regulations.

3.2 INFORMATION ACCESS

Except where protected from disclosure by applicable State or Federal law, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska, Department of Environmental Conservation, Anchorage, Alaska.

3.3 CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the Permittee from any potential civil or criminal liability for noncompliance with the permit or with applicable laws.

3.4 AVAILABILITY

The Permittee shall post or maintain a copy of this permit available to the public at the facility.

3.5 ADVERSE IMPACT

The Permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. The Permittee shall cleanup and restore all areas adversely impacted by the noncompliance.

3.6 CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work, which would disturb such resources, is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Alaska Department of Natural Resources (ADNR) (907-465-4563), is to be notified promptly.

3.7 APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), an application for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

3.8 OTHER LEGAL OBLIGATIONS

This permit does not relieve the Permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies, and to comply with the requirements contained in any such permits. All activities conducted and all plans implemented by the Permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

3.9 TRANSFER OF OWNERSHIP

In the event of any change in control or ownership of the permitted facility, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director of the Division of Water. The original Permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the Department approves assignment of the permit. The Department will not unreasonably withhold such approval.

As between the State and the Permittee, no transfer of this permit shall relieve the Permittee of any liability arising out of operations conducted prior to such transfer, regardless of whether such liability accrues before or after such transfer.

3.10 TOXIC POLLUTANTS

If during the life of this permit a new or revised toxic pollutant (including oil, grease, or solvents) concentration standard is established in accordance with 18 AAC 70 for a pollutant managed at this facility and that standard is more stringent than previously, then upon the effective date of the new rule, this permit automatically adopts the new toxic pollutant concentration standard and applies it to management of facility wastes.

3.11 POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the Permittee shall consider the following order of priority options as outlined in AS 46.06.021:

- 1st waste source reduction,
- 2nd recycling of waste,
- 3rd waste treatment, and
- 4th waste disposal.

4 FINANCIAL RESPONSIBILITY

4.1 PROOF OF FINANCIAL RESPONSIBILITY

Under AS 46.03.100(f), 18 AAC 15.090, and 18 AAC 60.265, the Department has authority and responsibility to require proof of financial responsibility for closure of the facility and post-closure monitoring.

- 4.1.1 The Permittee shall provide the Department with proof of financial responsibility for reclamation and closure of the facilities and post-closure monitoring. The proof of financial responsibility shall cover costs incurred for reclamation and closure and post-closure monitoring of clay ponds, sand ponds, the process water pond, and related facilities, shall cover the activities set out in section 4. The area covered by the financial responsibility required in this section is shown on the map attached as section 7.
- 4.1.2 The Permittee shall address the adequacy of the financial responsibility in the Annual Report required in section 2.4.4.
- 4.1.3 The proof of financial responsibility may be in the form of a trust fund, surety bond, letter of credit, insurance, enrolling in the reclamation bond pool managed by the ADNR, or by another Department-approved mechanism.

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- 4.1.4 Approved proof of financial responsibility must remain available through the post-closure period, at least five years, and may not be released in its entirety until the Department certifies in writing that closure of the facility and the required post-closure monitoring have been successfully concluded or that another entity has assumed responsibility for permit compliance, reclamation and closure activities, and post-closure monitoring.
 - 4.1.5 The Permittee must provide acceptable proof of financial responsibility within 60 days of the permit's effective date. The Department will accept or reject the financial surety as expeditiously as possible but in no event later than 30 days after its receipt.
 - 4.1.6 If the Permittee is unable to provide acceptable proof of financial responsibility to the Department, as approved by the Department in writing, within the time period stated above, this permit will expire automatically at that time, notwithstanding any other approvals to the contrary, unless the Department's failure to act is responsible for the delay in accepting or rejecting this proof.
 - 4.1.7 If the Permittee fails to comply with the terms and conditions of this permit and if the Department concludes that such failure may prevent, inhibit or delay satisfactory reclamation and closure or post-closure monitoring of the facility, then the Department may exercise its rights, under an approved mechanism and in cooperation with ADNR, to access financial responsibility funds and use them for reclamation and closure and post-closure activities.
 - 4.1.8 The Permittee can apply to have the amount of the financial responsibility adjusted during the life of the permit, if for example concurrent reclamation has been completed.

5 References

- DEC. 2003. 18 AAC 70, Water Quality Standards. State of Alaska, Department of Environmental Conservation, June 26, 2003.
- DEC. 2008. 18 AAC 70, Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances. State of Alaska, Department of Environmental Conservation, December 12, 2008.
- DEC. 2009. 18 AAC 70, Water Quality Standards. State of Alaska, Department of Environmental Conservation, September 19, 2009.
- DEC. 2013. 18 AAC 60, Solid Waste Management. State of Alaska, Department of Environmental Conservation, April 12, 2013.
- DEC. 2015. Elements of a Tier 2 Water Quality Monitoring Quality Assurance Project Plan (QAPP). State of Alaska, Department of Environmental Conservation, March 15, 2015.
- DEC. 2016a. 18 AAC 72, Wastewater Disposal. State of Alaska, Department of Environmental Conservation, October 22, 2016.
- DEC. 2016b. Groundwater Detection Monitoring Technical Memorandum 16.04. State of Alaska, Department of Environmental Conservation, October 2016.

6 GLOSSARY OF TERMS

AAC	Alaska Administrative Code
ADNR	Alaska Department of Natural Resources
AS	Alaska Statutes
DEC	Department of Environmental Conservation
MDL	Method Detection Limit
ML	Minimum Level of Quantification
MWMP	Meteoric Water Mobility Procedure
Permittee	Alaska Gold Torrent, LLC.
QAPP	Quality Assurance Project Plan
WQS	Alaska Water Quality Standards

7 Lucky Shot Mill Layout and Groundwater Monitoring Locations

